

TROPICAL CYCLONE 01A

Tropical Cyclone 01A, the only tropical cyclone to develop in the North Indian Ocean during the Spring transition season, distinguished itself by its non-climatological track. After developing in the western Arabian Sea, Tropical Cyclone 01A turned to the west-southwest and transited through the Gulf of Aden rather than moving to the north or northwest along the climatologically favored track and making landfall along the east coast of the Arabian peninsula. This is the only tropical cyclone of record to transit through the Gulf of Aden.

The disturbance which eventually developed into Tropical Cyclone 01A was first detected on 23 May as an area of strong convection centered approximately 180 nm (333 km) southeast of Socotra (WMO 61599). The convection persisted and the disturbance was mentioned as a suspect area in the Significant Tropical Weather Advisory (ABEH PGTW) at 0600Z on the 24th. The disturbance moved slowly northwestward during the next 36 hours with a gradual increase in organization. At 260051Z, a TCFA was issued prompted by the persistent slow improvement in the convective organization and by indications from satellite imagery that a small but well organized low-level circulation was developing. Throughout this period, synoptic data was unable to confirm the

presence of a surface circulation. At 261055Z, the first warning on Tropical Cyclone 01A, valid at 260600Z was issued. This was based on a Dvorak intensity analysis of Figure 3-31-1 which estimated that surface winds of 35 kt (18 m/s) were present.

Tropical Cyclone 01A remained a compact system throughout its life. Even at its maximum intensity of 45 kt (23 m/s) between 0000Z and 0600Z on 27 May, the radius of greater than 30 kt (15 m/s) winds was estimated to be only 60 nm (111 km). The small size of Tropical Cyclone 01A coupled with the sparsity of synoptic data in the area precluded any verification of surface intensity estimates. Intensity estimates on this system were based entirely on Dvorak satellite analysis.

Tropical Cyclone 01A moved northwestward until late on the 26th, when it turned to the west-southwest and entered the Gulf of Aden in response to a strong subtropical ridge over Saudi Arabia. Tropical Cyclone 01A transited up the Gulf of Aden until it made landfall at 0300Z on 28 May, approximately 35 nm (65 km) west of Berbera, Somalia (WMO 63160). After making landfall, Tropical Cyclone 01A moved inland over Somalia and dissipated. There were no reports of damages or injuries from this system.

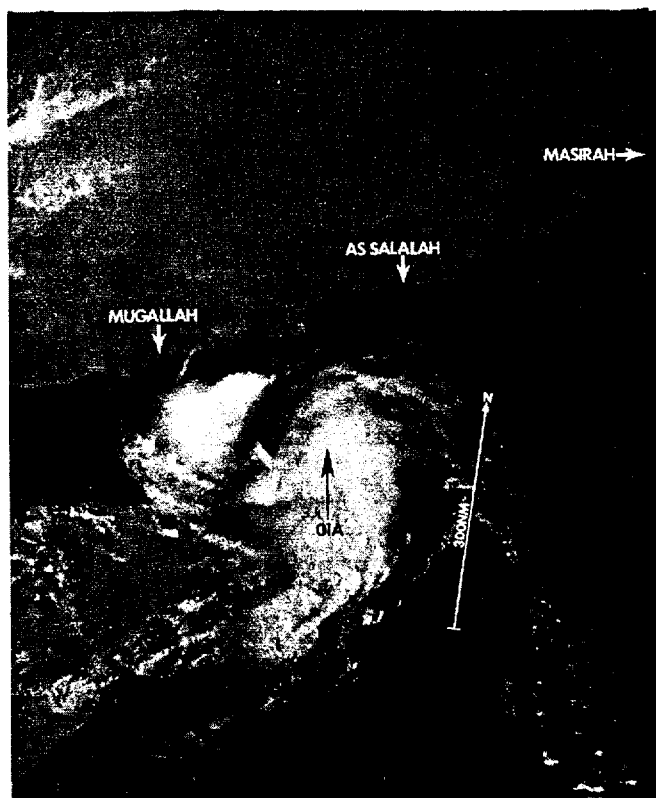


Figure 3-31-1 Tropical Cyclone 01A at the entrance to the Gulf of Aden (260617Z May DMSP visual imagery).